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On the problems of modern philology and the creative methodology of teaching foreign languages in the European educational system

Sobre los problemas de la filología moderna y la metodología creativa de la enseñanza de lenguas extranjeras en el sistema educativo europeo

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Abstract

The modern philology involves many creative methods in the study of foreign languages. European education system used measures related to the involvement of the new technologies and distance learning due to the global pandemic. The aim – to describe the latest methodology in combination with new technologies and creativity. The methodology of creative pauses was conducted among the students in Comenius University Bratislava. Methods: monitoring, testing, data analysis, description, experimental training using multimedia resources. The results showed that non-traditional methodologies (creative pauses) adapted to the FluentU media resource in combination with distance forms of education become an alternative to traditional learning.

Keywords: creativity, foreign language, non-traditional methodologies, innovations.

Resumen

La filología moderna implica muchos métodos creativos en el estudio de las lenguas extranjeras. El sistema educativo europeo utiliza medidas relacionadas con la participación de las nuevas tecnologías y la enseñanza a distancia debido a la pandemia mundial. El objetivo - describir la última metodología en combinación con las nuevas tecnologías y la creatividad. La metodología de las pausas creativas se llevó a cabo entre los estudiantes de la Universidad Comenius de Bratislava. Métodos: seguimiento, pruebas, análisis de datos, descripción, formación experimental con recursos multimedia. Los resultados mostraron que las metodologías no tradicionales (pausas creativas) adaptadas al recurso multimedia FluentU en combinación con las formas de educación a distancia se convierten en una alternativa al aprendizaje tradicional.

Palabras clave: creatividad, lengua extranjera, metodologías no tradicionales, innovaciones.

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Introduction

The European education system seeks to encourage, self-expression, and the comfort of the subjects of the learning process. Teachers are expected to provide quality instruction and to meet the needs and expectations of students. In the university context, teachers are expected to be aware of all educational innovations in their field, in particular the teaching of foreign languages. Given this imperative, the question arises as to what is new in the field of modern foreign language teaching. We are not talking about the application of new technologies, which certainly help to beat grammatical forms or to accustom the distinction of certain sounds, or to understand a written text. These forms do not allow for the full development of spontaneous expression or interaction as a social actor who must perform a communicative task.

As Alfadil (2020) notes, non-traditional methods and innovations are very effective, the mistake, however, would be to assume that technological innovation is necessarily based on or simultaneously provides conceptual innovation. Even if the teacher's role changes, he or she must guide the learner among the linguistic mazes, to find appropriate approaches.

First and foremost, everyone should understand the need to make learning more enjoyable, and less boring (Farrell & Kennedy, 2020). This idea is widely developed (Russell, 2020), where the scholar reveals the basics of "better learning," clearly emphasizing the importance of a mental environment that encourages stress-free learning, varied activities that are both creative and fun, and stimulates students' motivation to be interested in foreign languages. Of particular note is his idea of reusing recess for the benefit of language learning.

In the perspective of this work, non-traditional methodologies that offer practices, preferring different forms of creativity such as theater, music, rhythm, gesture, etc. are interesting. However, despite the great interest in play practices and creative activities, first of all, it is necessary to follow the programs approved by institutions or the educational system. Therefore, there is a dilemma in combining clear academic programs with experience, learning with fun. Creative and recreational breaks in this regard are poised to solve it (Wen & Chen, 2022).

The purpose of this paper is to describe the latest European methodological experience in teaching foreign languages to non-traditional methods,

and their creative and original adaptation during creative and recreational breaks in a distance learning environment.

Objectives of the paper: to define different types of pauses; to review the latest non-traditional methodologies; to discuss their possible adaptation during creative and recreational pauses; to determine the advantages of this teaching approach in combination with technical innovations.

Theoretical Framework or Literature Review

Any teacher feels perfectly well the need to pause during the learning process, even if students still seem quite active and able to follow the learning process. Rus (2020) identifies four types of pauses: recreational, simple physical (or biological), creative, and rich physical. According to him, the duration of pauses should always be defined, and it is very useful to create a ritual to signify the end of the pause, for example, to play a certain melody.

In a distance learning environment, there is no need for a detailed description of the possible activities during the physical pauses. Although it is possible to practice this remotely (under the guidance of a teacher, participants satisfy their natural needs, communicate with colleagues, perform stretching exercises or controlled breathing movements).

Pauses of this type are necessary and very useful for further work, however, when teaching foreign languages online, we should focus on recreational and creative breaks, which we can use for educational purposes.

An alternative to traditional breaks can be suggested by non-traditional methods of creative breaks, with the possibility of adapting them to remote learning. Non-traditionalism is seen as the opposite of pedagogical practices typically taken for granted, particularly by students, where the student is viewed as a holistic and creative individual (Caena & Redecker, 2019).

According to Onishchuk et al., (2020), recreational pauses help to relax the atmosphere, reduce tension, which allows to overcome language barriers, forget fear, and get rid of stress. The authors describe several possible options. For example, you can tell a short joke or a funny story, offer a simple game. Such a small activity will allow repeating the material, to

break the ice. Rhythmic repetition with visual exercises is very useful. This is very important for students who have to concentrate on their computer monitors all day.

Creative pauses, as the name implies, free the imagination. Short theatrical improvisations, art, drawing in computer applications, music, movies, and household items can serve as the basis for these small breaks from regular distance work (Caena & Redecker, 2019). The practical application of the multiple intelligences' theory used in the paper should also not be overlooked. (Hanzawa, 2021) states that not all students have the same level of intelligence and therefore the same type of activity is not appropriate for everyone and may demotivate some. If the educator finds different approaches to the subject, he achieves better results and avoids boredom, which, according to (Bruno Hurst) does not generate a healthy rebellion or reasonable acceptance, but rather his absorbing apathy sinks the body, sinks into a state of emotional stupor (Dufeu, 2020). In this context, mention should be made of linguistic psychodramaty (Baudracco-Kastner, 2022), which also facilitates the acquisition of a foreign language. Psychodramaty addresses the participant on physical, affective, intellectual levels, in its social and spiritual dimension. More unconventional foreign language learning techniques are described by (Pennycook, 2022). The authors emphasize the importance of positive emotions in the learning process. There are five non-traditional, creative methodologies, in other words, methodologies that offer different strategies for teaching/learning foreign languages: the community method, the silence method, the movement method, the suggestopedia, and the natural approach.

The community method (Macgilchrist, Allert & Bruch, 2020) proposes using a foreign language as a means of social interaction, that is, to introduce activities directed at everyone, not forgetting their emotions and feelings. The goal is to apply to the teaching of foreign languages the same methodology as in psychotherapy. Gradually the class becomes a community that shares its knowledge with each other. The disadvantages of this method are the lack of time and the availability of curricula. Shared class life becomes, unfortunately, a utopian idea. In addition, the use of small groups to accomplish a task as one whole social organism is highly recommended.

The natural approach of Corcoran et al., (2020) promotes speech comprehension and vocabulary

development and does away with grammar entirely since when we learn our native language from an early age, we do not teach grammar rules, everything comes by itself.

The method of silence (Weber & Mehandru, 2022), as its name indicates, according to which the teacher should remain silent for as long as possible to allow the students to express themselves, strive, and above all to develop their autonomy.

The method of general physical reaction (Pennycook, 2022), or in other words the method of movement, is very simple, here the gesture plays a very important role. It is based on an imperative, the teacher gives orders, and the students move a lot to perform the assigned task, facilitating vocabulary memorization. But it should be noted the impossibility of this type of work during distance learning. On the other hand, it is possible to resort to this method during a short pause (as a presentation of the imperative inclination or prepositions of place).

Suggestopedia (Macgilchrist, Allert & Bruch, 2020) - the method differs greatly from other non-traditional techniques by emphasizing musical rhythm and classroom decorum. (Caena & Redecker, 2019) are of the opinion that in a carefully organized learning environment, one can accelerate the pace of learning 3 to 10 times, while creating an enjoyable and relaxing environment. The author practiced different reading techniques accompanied by excerpts of music by Mozart, Bach, Haydn, or Beethoven to achieve a state of psychorelaxation and concentration. It is necessary to vary the tone and rhythm of the reading with the musical accompaniment (Worsham & Kalita, 2020). The type and choice of music is very important. Suggestopedia has the disadvantage of being too long.

All of these presented methods are creative because they completely eliminate stress, feelings of inferiority and insignificance, and, of course, routine, which is considered the main obstacle to learning a foreign language. Nevertheless, they are not well studied. We believe that it is important to know them to apply their new adaptation and to practice them during creative or recreational breaks.

Methodology

The experiment was conducted at Comenius University in Bratislava. Comenius University in Bratislava among 1st and 2nd year English

Philology students in English Language and Literature. Students of 1-2 years (two semesters) participated (2 subgroups). The experiment was conducted throughout the 2019-2020 year.

Given learning experimentation consisted of the next stages:

1. the first stage of the experimentation;
2. hands-on learning;
3. transitional observation;
4. questionnaires;
5. post-experimental stage.

The hypothesis is put forward: the process of development of speech competence among full-time the students of the first year in the specialty “English language and literature” becomes more effective if creative pauses with the use of innovative technologies and new, non-standard methodologies are applied. The use of Internet resources using FluentU technologies allows conducting classes and creative pauses, making possible types of activity aimed at forming all components of English speech competence (Fig. 1):

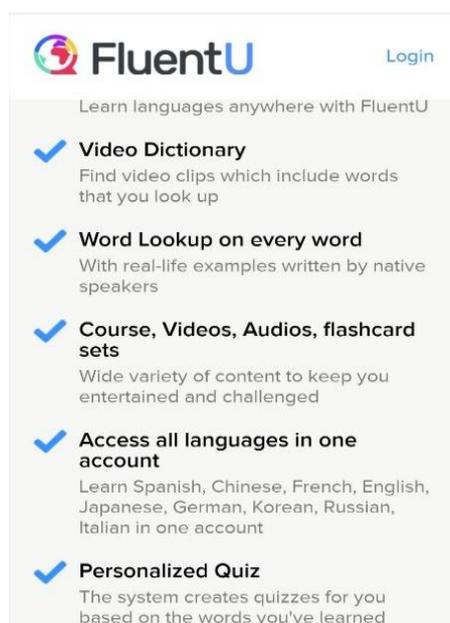


Figure 1. FluentU media resource interface.

Source: Language Immersion Online. (Fluentu, n.d.).

The purpose of the first stage was to identify the initial level of knowledge of the participants of the experiment; the formation of foreign language speech competence to determine the selected group of students’ quantity and quality arrangement. The design of the experiment - the experimental groups were compared at all stages of the study. So, both groups of apprentices were observed for 2 years. One group 2 was engaged in distance learning, according to the traditional, established algorithm of distance learning institutions. Group 1 had creative pauses with the introduction of different types of creative activities in the context. To obtain reliable results, identical pairs of students with extremely similar scores on certain traits were chosen. This made it possible to take into account not only general data but also individual data. To fix the preliminary level of foreign language speech capability between the 1st year students an experimental test was carried out. The

experiment was conducted in 2019 (second semester) - 2020 (first semester) during the strict lockdown in two groups of 12 students each. The test materials chosen were a task from the University of Cambridge website, <https://www.flo-joe.co.uk/cae/students/tests/>. Students were selected according their responses to the exit test. In addition, a questionnaire on the practical use of the FluentU media resource was conducted.

To achieve the results and to prove the hypothesis the following scientific methods were applied: training-experiment with the use of educational media resources FluentU, observation, data counting, description, and presentation of results.

Results and Discussion

The pedagogical experiment had the following objectives: academic (took place during the study); hypothetical (test); natural (experimental groups were chosen randomly); horizontal (control and experimental groups); openness (open questioning). The results of the investigational stage clusters had a regular level of foreign language speech competence. Group 1 should improve their level after working with the educational media resource FluentU and the use of creative pauses.

Pedagogical experiment, during which the developed system of activities for creative pauses with the help of FluentU media resource was tested. The training itself was held remotely, according to the traditional university algorithm. FluentU media resource was involved in the learning process, with the help of which students received additional material, but in a playful relaxed form during the creative pauses. The progress in the development of speech competence was monitored during the experiment. The time of the education experimentation was chosen according to teacher needed extra time to fill in the material in FluentU, as the selection of the material was made, which was coordinated with the curriculum. Consequently, there is no need to describe the work of group 2, which was engaged in the established algorithm of distance learning. Experimental group 1 used the approach of creative pauses based on suggestopedia. It is important to maintain a certain dynamism and creativity that would not have been possible

without using FluentU, as the google meet learning platform has much fewer media features and was used for group 1 solely to create a collaborative conference. Of course, FluentU provides many ideas and possibilities for implementing games and other communicative activities in foreign language classes. In this case, it was important to choose the right moment to implement them. A special place is the sound quality, a very important factor in adapting to new sounds. In this sense, FluentU is very convenient because its technical characteristics can be downloaded to any device, while its advanced parameters will not distort the sound.

The combination of technology and creativity is ideal, it allows you to fill the breaks, both recreational and creative.

So, at the end of the experiment, both groups compiled a module from foreign language speech competence. Assessment criteria: Reading (Reading - one hour and quarter), Writing (Writing - one hour and quarter), Listening (Listening - 45 minutes); - 15 minutes). The exam was administered in three phases: the first was Reading and Writing, the next was Verbal Skills, Speaking and Listening, and the other was a short study of the participants. Consequently, when passing all parts of the Cambridge examination, where the maximum was 253 points. The statistical calculation of the results is as follows: high level - 80%-100% - 180 points or more; average - 60%-79% - 151-200 points; low level - less than 60% - 150 points or less. The results were as follows (Tab.1):

Table 1.
Sum of students' points in groups 1,2

First group	Score	Second group	Score
Student 1	196	Student 1	149
Student 2	184	Student 2	175
Student 3	197	Student 3	183
Student 4	177	Student 4	182
Student 5	176	Student 5	185
Student 6	200	Student 6	166
Student 7	170	Student 7	169
Student 8	181	Student 8	144
Student 9	191	Student 9	150
Student 10	181	Student 10	177
Student 11	200	Student 11	189
Student 12	197	Student 12	167

Table: author's own development

Consequently, the average score for group 1 is 187.5 (high); for group 2 - 169.6 (average). The results of the experiment confirmed the hypothesis that the level of formation of foreign language speech competence of students of the 1st year (2nd and 1st semester of study 2019-2020) increased due to the specially developed method of work with educational media resources and with the introduction of creative pauses.

The effectiveness of using digital online technologies is obvious and has been sufficiently researched. There is no doubt about their use to teach English not individually to philological students (as in this case) but also to those, who wish to specialize in other sciences. Of particular practical value according to Blume (2020), cloud computing technologies together with social media resources offer great occasions to learn English, particularly to improve writing skills. The flexibility of using social media or additional programs for learning English is debated (Eickelmann & Gerick, 2020). Other scholars, particularly (Assis Gomes et al., 2017), note the convenience aspect of daily smartphone use with downloaded learning social media, dossier sharing, messengers, and mobile apps. However, very little has been written about creative study breaks. After all, the benefits of this type of activity are enormous; this type of activity facilitates memorization, reduces or eliminates the stress that is significantly detrimental to the learning process (Escobar Fandiño, & Silva Velandia, 2020). It is quite possible to use activities such as gestures, pantomime, drama, and voice games at the beginning of a lesson as a warm-up, icebreaker, or entry to a subject to introduce the grammatical topic you want to work on during that class or, simply put, to surprise and break down the classic dynamics of a language course (Goh & Sigala, 2020). Solidify, they can be done in the middle of a class when students are tired, not too focused. According to Leigh et al., (2020), using some simple techniques improves memorization because anything students learn quickly stays only for a while in short-term memory, to retain the information, it would have to be repeated after 10 minutes, 48 hours, next week, next month, and six months after or before the exam. From this perspective (Asad, Hussain, Wadho, Khand & Churi, 2020) suggests going back to a subject that needs to be repeated every time doing a different activity.

Every educator knows the “problem of finishing a lesson,” Creative Pauses is a great opportunity to fill those few minutes with a rhythmic song

that makes you forget the fatigue caused by a heavy topic (Morgan, 2020). In addition to enjoyment, this method of work is becoming an increasingly privileged means of awakening a desire to learn.

Limitation of the experiment: data analysis requires quite a long time. Practical application of the results is conceivable for the teaching course at schools in foreign language departments, not only for the development of foreign language talking competence in English but similarly for other languages. The results can be an addition to the previously presented methods of foreign language education. The results contribute to the extending of research in the field of linguistics, translation studies, and philology. The main requirements of the experimentation can be applied in the exercise of teaching English in the full-time form of education, by correspondence, in foreign language courses. Further research can continue in the direction of theoretical explanation of the combination of technology, creativity, and psychology in education.

Conclusions

The charge of the investigation lies in the development of approaches of working with instructive media resources in combination with creative methods designed for the development of students' creativity; foreign language communicative competence and simply and progressively included in the general context of teaching foreign languages in higher education in a distance learning environment. The main pedagogical conditions of the effectiveness of the method's content application are:

- determination of the peculiarities of the educational environment of higher education institutions;
- improvement of students' language activity as a result of implementing the educational media resource FluentU, improved based on the results of the formation of foreign language speech competence diagnostics;
- learning format - online mode.

The practical use of the method and the results of the experimentation under study can be included in the educational process of colleges at the sections of foreign languages, not only for English but also with suitable adjustments for other languages. The results balance the standard methods of developing foreign language speech competence.

The combination of technical and creative methodologies is extremely necessary during the coronavirus pandemic. Their application makes it possible to:

- encourage students to express themselves passionately, without frustration, and to feel comfortable;
- quickly acquire fluidity of expression by combining grammatical or lexical structures in a dynamic and fun way.
- complement traditional education.
- avoid boredom and routine.
- not contradict the programs developed by the institutions.

Bibliographic references

- Alfadil, M. (2020). Effectiveness of virtual reality game in foreign language vocabulary acquisition. *Computers & Education*, 153(103893), 103893. <https://doi.org/10.1016/j.compedu.2020.103893>
- Asad, M. M., Hussain, N., Wadho, M., Khand, Z. H., & Churi, P. P. (2020). Integration of e-learning technologies for interactive teaching and learning process: an empirical study on higher education institutes of Pakistan. *Journal of Applied Research in Higher Education*, 13(3), 649–663. <https://doi.org/10.1108/jarhe-04-2020-0103>
- Assis Gomes, C. M., Almeida, L. S., & Núñez, J. C. (2017). Rationale and Applicability of Exploratory Structural Equation Modeling (ESEM) in psychoeducational contexts. *Psicothema*, 29(3), 396–401. <https://doi.org/10.7334/psicothema2016.369>
- Baudracco-Kastner, M. (2022). Online language lessons with the PDL (language psychodramaturgy): ways to a virtual encounter [Online-Sprachunterricht mit der PDL (Sprachpsychodramaturgie): Wege zu einer virtuellen Begegnung]. *Journal of Psychodrama and Sociometry [Zeitschrift für Psychodrama und Soziometrie]*, 21(1), 131–142. <https://doi.org/10.1007/s11620-022-00657-w>
- Blume, C. (2020). German teachers' digital habitus and their pandemic pedagogy. *Postdigital Science and Education*, 2(3), 879–905. <https://doi.org/10.1007/s42438-020-00174-9>
- Caena, F., & Redecker, C. (2019). Aligning teacher competence frameworks to 21st century challenges: The case for the European Digital Competence Framework for Educators (Digcompedu). *European Journal of Education*, 54(3), 356–369. <https://doi.org/10.1111/ejed.12345>
- Corcoran, C. M., Mittal, V. A., Bearden, C. E., Gur, R., Hitzenko, K., Bilgrami, Z., Savic, A., Cecchi, G. A., & Wolff, P. (2020). Language as a biomarker for psychosis: A natural language processing approach. *Schizophrenia Research*, 226, 158–166. <https://doi.org/10.1016/j.schres.2020.04.032>
- Dufeu, B. (2020). The dramaturgy in psychodramaturgy [Die Dramaturgie in der Psychodramaturgie]. *Scenario*, XIV(1), 64–97. <https://doi.org/10.33178/scenario.14.1.5>
- Eickelmann, B., & Gerick, J. (2020). Learning with digital media. Objectives in times of Corona and with special consideration of social inequalities [Lernen mit digitalen Medien. Zielsetzungen in Zeiten von Corona und unter besonderer Berücksichtigung von sozialen Ungleichheiten]. New York: Waxmann. <https://doi.org/10.25656/01:20235>
- Escobar Fandiño, F. G., & Silva Velandia, A. J. (2020). How an online tutor motivates E-learning English. *Heliyon*, 6(8), e04630. <https://doi.org/10.1016/j.heliyon.2020.e04630>
- Farrell, T. S., & Kennedy, J. (2020). “My Personal Teaching Principle Is' Safe, Fun, and Clear”: Reflections of a TESOL Teacher. *Iranian Journal of Language Teaching Research*, 8(2), 83–96. <https://eric.ed.gov/?id=EJ1258694>
- Goh, E., & Sigala, M. (2020). Integrating Information & Communication Technologies (ICT) into classroom instruction: teaching tips for hospitality educators from a diffusion of innovation approach. *Journal of Teaching in Travel & Tourism*, 20(2), 156–165. <https://doi.org/10.1080/15313220.2020.1740636>
- Hanzawa, K. (2021). Development of second language speech fluency in foreign language classrooms: A longitudinal study. *Language Teaching Research*, 136216882110086. <https://doi.org/10.1177/13621688211008693>
- Fluentu (n.d.). Language Immersion Online. Retrieved August 29, 2022, from <https://www.fluentu.com/>
- Leigh, J., Vasilica, C., Dron, R., Gawthorpe, D., Burns, E., Kennedy, S., Kennedy, R., Warburton, T., & Croughan, C. (2020). Redefining undergraduate nurse teaching during the coronavirus pandemic: use of digital technologies. *British Journal of Nursing (Mark Allen Publishing)*, 29(10), 566–569.



- <https://doi.org/10.12968/bjon.2020.29.10.566>
- Macgilchrist, F., Allert, H., & Bruch, A. (2020). Students and society in the 2020s. Three future 'histories' of education and technology. *Learning, Media and Technology*, 45(1), 76–89. <https://doi.org/10.1080/17439884.2019.1656235>
- Morgan, H. (2020). Best practices for implementing remote learning during a pandemic. *Clearing House (Menasha, Wis.)*, 93(3), 135–141. <https://doi.org/10.1080/00098655.2020.1751480>
- Onishchuk, I., Ikonnikova, M., Antonenko, T., Kharchenko, I., Shestakova, S., Kuzmenko, N., & Maksymchuk, B. (2020). Characteristics of foreign language education in foreign countries and ways of applying foreign experience in pedagogical universities of Ukraine. *Romanian Magazine for Multidimensional Education [Revista Romaneasca Pentru Educatie Multidimensionala]*, 12(3), 44–65. <https://doi.org/10.18662/rrem/12.3/308>
- Pennycook, A. (2022). Critical applied linguistics in the 2020s. *Critical Inquiry in Language Studies*, 19(1), 1–21. <https://doi.org/10.1080/15427587.2022.2030232>
- Rus, D. (2020). Creative methodologies in teaching English for engineering students. *Procedia Manufacturing*, 46, 337–343. <https://doi.org/10.1016/j.promfg.2020.03.049>
- Russell, V. (2020). Language anxiety and the online learner. *Foreign Language Annals*, 53(2), 338–352. <https://doi.org/10.1111/flan.12461>
- Weber, S., & Mehandru, N. (2022). The 2020s political economy of machine translation. *Business and Politics*, 24(1), 96–112. <https://doi.org/10.1017/bap.2021.17>
- Wen, H., & Chen, L. (2022). “Suspending Classes Without Pauses for Learning”: What Do Chinese Secondary Teachers Think About Remote Teaching Following the Pandemic?. In *Cases on Practical Applications for Remote, Hybrid, and Hyflex Teaching* (pp. 139-158). IGI Global. <https://www.igi-global.com/chapter/suspending-classes-without-pauses-for-learning/300108>
- Worsham, J., & Kalita, J. (2020). Multi-task learning for natural language processing in the 2020s: Where are we going? *Pattern Recognition Letters*, 136, 120–126. <https://doi.org/10.1016/j.patrec.2020.05.031>